

REMARKS

Reconsideration of this application as amended is requested. By this amendment Applicants have corrected an obvious grammatical error at page 4 of the specification, and have amended claim 1 for clarity. Claims 1 and 2 remain in the case.

The Examiner rejected claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by Alexander (U.S. Patent No. 6,201,384). The Examiner states that Alexander teaches a method of indicating and manipulating a zoom region within a long data record comprising displaying the long data record as a displayed waveform (*Figs. 3A and columns 7-8*); in response to zoom data that defines a location and scale for the zoom region (*defining the starting and ending points by pointing device and defining vertical and horizontal scaling; Figs. 2-3(B), column 9, line 53 - column 10, line 67*) displaying a zoom region indicator (*zoom region marker as described in column 7, lines 30-67*) representing the zoom region with the displayed waveform (*the rescaling rectangle is a zoom region with the displayed waveform shown in Fig. 3(A)*), the zoom region indicator (*the zoom region marker*) having an associated marker that spans the zoom region and has at least a minimum length (*the marker defining the starting and ending points by the pointing device and defining vertical and horizontal scaling; Figs. 2-3(B), column 9, line 53 - column 10, line 67*); displaying a portion of the displayed waveform defined by the zoom region as a zoomed waveform (*displaying the rescaled rectangle of the displayed waveform defined by the zoom region as a zoomed waveform shown in Fig. 3(B) as the entire waveform display regions and column 11, lines 56-67*); and manipulating the zoom region by moving the associated marker with a pointer device to display other portions of the displayed waveform as the zoomed waveform (*the graphical user interface through the selection of menu items, key strokes, voice activation and through the use of any type of input device such as the point device 110 allows manipulating the zoom region by toggling between the original and new scaling and undoing or redoing the scaling dictated by the rescaling rectangle 310 and return the waveforms and display element to their original scaling; column 12, lines 23-67; the user may deselect waveform scaling through the selection of an*

arbitrary point outside the rescaling rectangle 310; column 10, lines 36-59; and the user further selects the zoom region using the cursor; column 12, lines 1-67; and this process of selecting and deselecting continues). Further the Examiner states that Alexander discloses displaying the zoomed waveform in a different color from the one used to display the displayed waveform (*the priority encoder sends the selected color to the VRAM 146 which then causes the pixel to be rendered in the indicated color and a rectangular pixel area is typically defined within DRAM 148 with the programmed color typically dark gray; column 7, line 30 - column 8, line 16; column 9, line 63 - column 10, line 7*) with the zoom region indicator being displayed in the different color (*the color the marker is rendered at the pixel location providing a display that appears to show the marker over the waveform; column 7, line 30 - column 8, line 16 and column 9, line 63 - to column 10, line 7*) Applicants respectfully traverse these improper and nonobvious conclusions by the Examiner.

Applicants' claimed invention is a method of locating and manipulating zoom regions in a displayed waveform that represents a long data record. As shown in Fig. 3 a first display region 32 contains the displayed waveform representing the entire long data record, and zoom display regions 34, 36, 38 contain a portion (zoomed waveforms 42, 44, 46) of the displayed waveform selected from the long data record. The location of the zoomed waveforms in the long data record are indicated by appropriate dotted rectangles 48 or other indicia of the width of the zoom regions, which rectangles have associated markers 50 that span the width of the respective rectangles. However if the rectangle has a width such as to be difficult to see, the marker maintains a minimum width larger than the rectangle's width. The purpose of the present invention is to let the user know which of the zoom display regions correspond to the indicated zoom regions in the first display region, i.e., where the zoomed waveform is located within the long data record. To manipulate one of the zoomed waveforms the associated marker is manipulated by moving it along the long data record display so that the new portion of the long data record encompassed within the associated rectangle is shown in the associated zoom display region. There is no need to cancel and redraw the associated rectangle. The color for the zoom region indicator and the associated zoom waveform are the same, but different from the color for the displayed waveform

representing the long data record.

In contradistinction to Applicants' claimed invention Alexander shows how to draw a rectangle 310 to define a region on a displayed waveform 308 within a display region 302 for rescaling, and then to automatically display the portion of the waveform within the rectangle as a waveform 312 rescaled to fill the display region. Alexander provides for toggling back and forth between the original and rescaled waveforms within the display region. There is no "associated marker" with the rectangle of Alexander. The markers that the Examiner references merely indicate the two points between which the rectangle is drawn. There is no indication of a long record data waveform. There is no indication as to how to manipulate the rescaling rectangle so the rescaled waveform represents another portion of the original waveform without returning to the original waveform and redrawing the rectangle over a new portion of the original waveform.

Applicants recite in claim 1 "indicating and manipulating a *zoom region within a long data record*." [Emphasis added.] Columns 7 and 8 of Alexander do not indicate that there is a long data record, but only that a waveform is acquired and displayed. The rescaling rectangle of Alexander merely indicates within the original waveform a "zoom" region, but there is no mechanism disclosed for manipulating the zoom region, i.e., moving it along the original waveform so as to encompass a different portion of the original waveform for rescaling. Applicants recite "displaying the long data record as a displayed waveform." It appears that the Examiner is equating the original waveform with the long data record waveform, although there is no indication in Alexander that the original waveform is a "long data record." Applicants agree that the "zoom region indicator" is comparable to the rescaling rectangle of Alexander as one form of indicator, but submit that Alexander does not have "an associated marker that spans the zoom region and has at least a minimum length." The Examiner confusingly first says that Applicants' "associated marker" is the zoom region indicator (rescaling rectangle of Alexander) and then that it is the marks defining the starting and end points of the rescaling rectangle of Alexander. However Applicants' recited "associated marker" spans the zoom region so that, if the zoom region has a very narrow width, the marker does not get less than a minimum length. This feature indicates that the marker is independent of the zoom

region indicator to a certain extent to cover the case where the zoom region is just a few pixels in width. This is neither taught nor suggested by Alexander. For clarity Applicants have amended claim 1 to recite that the zoom region has a width and the associated marker spans the width. Finally Applicants recite manipulating the zoom region by “moving the associated marker along the displayed waveform.” In order for Alexander to move the “zoom” region, the rescaling rectangle has to be canceled and then redrawn over a different portion of the original waveform, which is cumbersome as compared to the claimed “moving of the associated marker along the displayed waveform.” Applicants’ have amended claim 1 to clarify that the associated marker is moved along the displayed waveform, as was already apparent to one of ordinary skill in the art who had read the specification in that movement of the associated marker caused the zoom region to be relocated “to display other portions of the displayed waveform as the zoomed waveform.”

With respect to claim 2 there is no reason for Alexander to display the rescaled waveform in a different color from the original waveform since only one or the other is displayed at any time. Only for multiple zoom regions being displayed simultaneously with the long data record waveform is it necessary to use different colors so that the user knows which displayed zoom waveform is associated with which zoom region on the long data record waveform. Alexander merely indicates that the outline of the zoom region (rescaling rectangle) has a different color from the waveform and that, if the points of the two (rectangle and original waveform) coincide, then the priority mechanism determines which color is transmitted for display. Alexander does not indicate that the original and rescaled waveforms themselves may be of different colors since they are not displayed simultaneously. Alexander merely differentiates the rescaling rectangle from the original waveform. Therefore Applicants’ recitation of the zoomed waveform being of a different color from the displayed waveform (long data record waveform) with the zoom region indicator being of the same color as the associated zoomed waveform is neither taught nor suggested by Alexander. Thus claims 1 and 2 are deemed to be allowable as being neither anticipated nor rendered obvious to one of ordinary skill in the art by Alexander.

In view of the foregoing amendment and remarks allowance of claims 1 and 2 is urged, and such action and the issuance of this case are requested.

Respectfully submitted,

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